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Operations and Services
Tropical Cyclone Weather Services Program, NWSPD 10-6

COORDINATION, BACKUP, AND EMERGENCY OPERATIONS

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1. Coordination.

1.1 Tropical Cyclone Forecasts and Advisories.

1.1.1 Atlantic and U.S. Mainland West Coast. National Hurricane Center (NHC), Marine Prediction Center (MPC) and Hydrometeorological Prediction Center (HPC) will exchange forecast positions for tropical cyclones and depressions. HPC will prepare and coordinate forecast positions four times each day (0200, 0800, 1400, 2000 Coordinated Universal Time [UTC]) for all tropical cyclones with an initial position west of 60°W. MPC will do the same for all tropical cyclones north of 20°N and east of 60°W unless otherwise agreed to by the MPC lead forecaster and the NHC duty hurricane specialist. HPC and NHC will also conduct discussions each day at noon (EDT and EST) to coordinate tropical cyclone positions for days 4 through 7. NHC will provide HPC and MPC with regular 3 hourly map-time positions for use in HPC and MPC surface analysis (0000, 0300, 0600 UTC, etc.).

HPC and MPC will place on its prognostic surface charts NHC's and Central Pacific Hurricane Center's (CPHC) tropical cyclone forecast position out to 72 hours. Unnamed systems forecast to attain tropical storm or hurricane/typhoon strength during the forecast period will have their prognostic positions labeled as a tropical cyclone. For day 3 through 7 charts, HPC will use appropriate tropical cyclone symbols on the day 3 chart, and depict the storm as a low, using the symbol "L" for days 4 through 7. MPC will also depict the storm as a low on their 96-hour surface chart.

NHC, HPC, and WFOs will coordinate the issuance and discontinuance of watches and warnings, storm surge, and other storm parameters. Include HPC's National Precipitation Prediction Unit (NPPU) in coordination calls whenever NHC plans to include quantitative precipitations forecast amounts (usually 24-hour forecasts or less) for the United States mainland in tropical cyclone advisories. Make final coordination calls 1 hour before advisory time. NHC will involve all impacted regional offices, Weather Forecast Offices (WFO), and marine offshore and high seas forecast offices (MPC, Tropical Analysis Forecast Branch [TAFB]) in the coordination call with HPC. NHC will make every effort to coordinate with these offices prior to the conference call, resources permitting, if issuing or canceling watches or warnings.

1.1.2 Pacific. NHC and CPHC will coordinate whenever a tropical cyclone is between 137° and 143° west longitude. In the event of a disagreement, the Center issuing the next advisory will make the final decision.

1.2 Other Advisories. NHC and HPC will coordinate on downgrading tropical and subtropical cyclones moving inland. HPC will also coordinate with NHC if there is a reasonable possibility advisories may again be needed. This coordination will take place no later than 90 minutes before HPC's public advisory release time. HPC will coordinate with appropriate River Forecast Centers (RFC) and critical flood support office(s) regarding inland flooding threats.

1.3 Flooding. Tropical Cyclone Centers will include flood information in their advisories and initiate coordination calls. RFCs and local NWS forecast offices will provide input to their Tropical Cyclone Center regarding flood potential. NPPU products will be consistent with advisory issuing offices. The National Environmental Satellite, Data, and Information Satellite Satellite analysis branch will provide satellite estimates of rainfall to NWS offices and the NHC.

1.4 Tornadoes. Storm Prediction Center (SPC) will, for CONUS areas, be the single coordinated voice of the NWS regarding tornado threats and will issue tornado watches as required for areas affected by tropical and subtropical cyclones. SPC should coordinate with NHC and WFOs before issuing a tornado watch. To assist NHC, this coordination should be done about 2 hours before the next scheduled tropical cyclone advisory issuance time if possible. Hurricane Local Statements (HLS) will convey the level of tornadic threat forecast by SPC based upon SPC products. Tropical Cyclone Centers will include appropriate information about tornadoes in their advisories. WFO San Juan, Puerto Rico, and Tiyan, Guam, will cover any tornadoes or tornadoes over water expected in their area of responsibility in HLSs and warnings.

1.5 Military Services. The NWS is the basic source of tropical cyclone forecasts for all Department of Defense (DOD) interests in the North Pacific east of 180° and for the North Atlantic as provided by interdepartmental agreements in the National Hurricane Operations Plan (NHOP). If the DOD wish to discuss special problems concerning warnings and forecasts for the Atlantic area, they should contact the NHC Director or the NHC hurricane specialist on duty by telephone. In the Pacific, the NHC Director or the CPHC will provide similar services to the military.

1.6 Requesting Geophysical Fluid Dynamics Laboratory (GFDL) Model Guidance. NHC will make the decision to run the GFDL hurricane model for any tropical or subtropical storm in the Atlantic or eastern Pacific Ocean. NHC will forward its requests to the NCEP Central Operations Senior Duty Meteorologist (SDM), and the SDM executes the job run. CPHC makes requests for running the GFDL hurricane model in coordination with NHC.

2. Backup of Tropical Cyclone Centers. In the event of operational failure of a Tropical Cyclone Center, transfer responsibilities to the appropriate alternate facility in accordance with existing directives.

Primary and backup facilities are:

PRIMARY	BACKUP FACILITY
NHC	HPC/MDL
CPHC	NHC
TAFB	MPC/CPHC
JTWC	NAVPACMETOCCEN, Yokosuka

2 .1 In the event NHC loses operating capabilities, HPC will assume backup operations of NHC. NHC, co-located with TAFB, has warning service responsibility for the Atlantic and for the eastern Pacific Ocean, north of the equator and east of 140° west longitude. Backup to NHC requires backup

to TAFB. If NHC is not able to return to full operations within 12 to 24 hours of transfer, fly at least two NHC hurricane specialists to HPC to assist in backup operations. When working in emergency backup mode, the Meteorological Development Laboratory, Evaluation Branch at WSH, will assume responsibility for running the Sea, Lake, and Overland Surges from Hurricanes Model (SLOSH) for HPC and to assist in interpretation. Backup tests will be conducted annually.

2.2 In the event CPHC loses operating capabilities, NHC will assume all central Pacific tropical cyclone responsibilities through the hurricane specialist unit. Marine and satellite services are provided through TAFB and MPC. Backup tests will be conducted annually.

2.3 In the event WFO Guam loses operating capabilities, CPHC will assume responsibility for issuance of public tropical cyclone advisories.

3. Transfer of Responsibility for Issuing Advisories. When a tropical or subtropical cyclone approaches the line of division between Centers responsible for issuing advisories, the forecaster who is currently handling the storm will:

a. Contact the Center into whose area the storm is moving to plan for transferring responsibility after the issuance of the next advisory. When a tropical cyclone is approaching 180° longitude, CPHC will coordinate with both Regional Specialized Meteorological Center (RSMC) Tokyo (the World Meteorological Organization [WMO] designated tropical cyclone center) and Joint Typhoon Warning Center (JTWC) (the U.S. designated center for U.S. interests in the western Pacific) for transferring responsibilities, and

b. Add a statement to the final advisory as follows:

"THE NEXT ADVISORY ON (storm name) WILL BE ISSUED BY THE (appropriate Tropical Cyclone Center) AT (time in [UTC])."

Include proper communication and WMO message headers used by the gaining Center in the final advisory. HPC will issue storm summaries on a subtropical cyclone or named tropical cyclone which has moved inland when advisories are no longer required. NHC will add to the last advisory an appropriate statement indicating when HPC will begin issuing summaries. NHC will coordinate with HPC to determine the time of issuance of the first storm summary.

4. Emergency Operating Instructions. National Centers and WFOs with primary and backup warning and forecast responsibilities for areas within 300 miles of the Gulf and Atlantic coasts and east or south of the Appalachian ridges, in Hawaii, Puerto Rico, Guam, on the California coast from Point Conception southward, and American Samoa in the South Pacific will prepare and keep an up-to-date local Tropical Cyclone Emergency Operations Plan. The Plan should specify actions to be taken. Include the following in the Station Duty Manual:

a. What to do before each tropical cyclone season;

b. What to do when a tropical cyclone constitutes a possible threat to its county warning area (CWA);

c. What to do when a tropical storm, hurricane or typhoon watch, or inland tropical storm/hurricane wind watch is issued for its CWA;

d. What to do when a tropical storm, hurricane or typhoon warning, or inland tropical storm/hurricane wind warning is issued for its CWA; and

e. What to do immediately after the tropical cyclone has passed.

4.1 Emergency Warnings Exercises. Conduct practice exercises before the tropical cyclone season each year. Include the word "EXERCISE" at the beginning and end of each community exercise. Also conduct office backup and other appropriate drills.

4.2 Emergency Action When Warning Not Received or Considered Inadequate. When warnings are not received by WFO or are inadequate to cover current or imminent conditions, local NWS forecast offices should issue HLSs or warnings as needed. Whenever possible, the WFO should contact the appropriate Tropical Cyclone Center and its clearance obtained before such action is taken. However, take immediate action if communications failure prevents clearance or if the delay would jeopardize life or property. Notify the appropriate Tropical Cyclone Center as soon as possible.